YaST : Looking ahead

Duncan Mac-Vicar P. <dmacvicar@suse.de>
Team Lead, YaST, Germany
FOSDEM 2009

Novell

Agenda

- **Where are we?** (8 min.)
- **Challenges & Future Work** (12 min.)
- **Demo** (15 min.)

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YaST, where are we?

Complete

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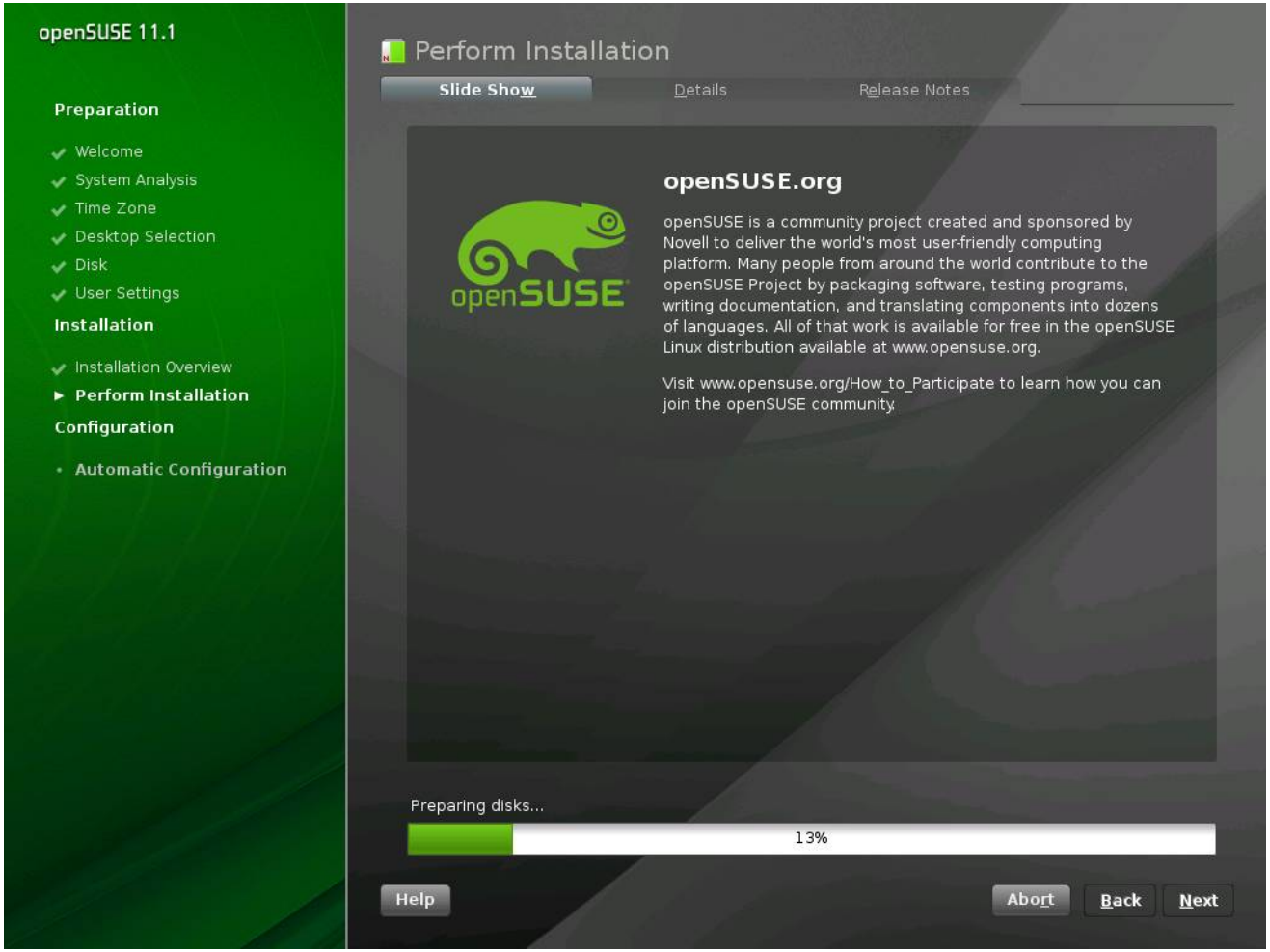
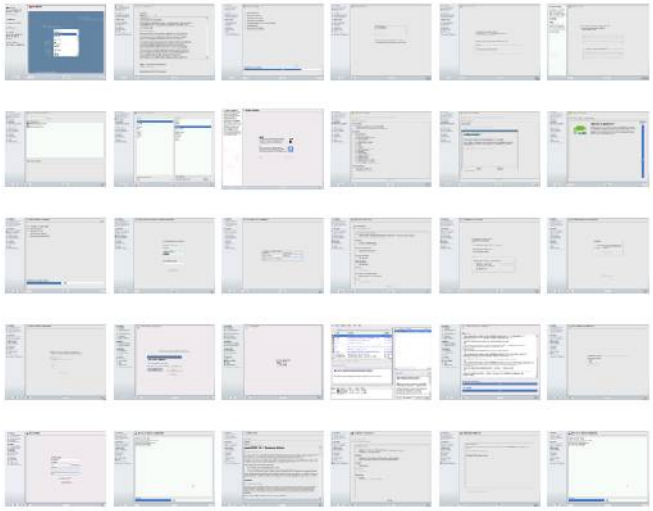
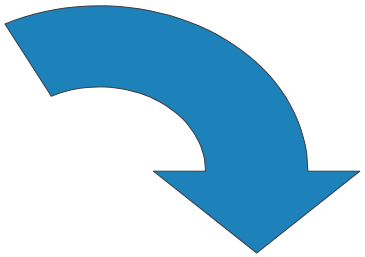
Novell

install

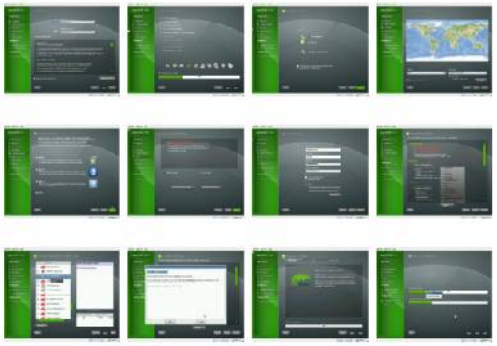


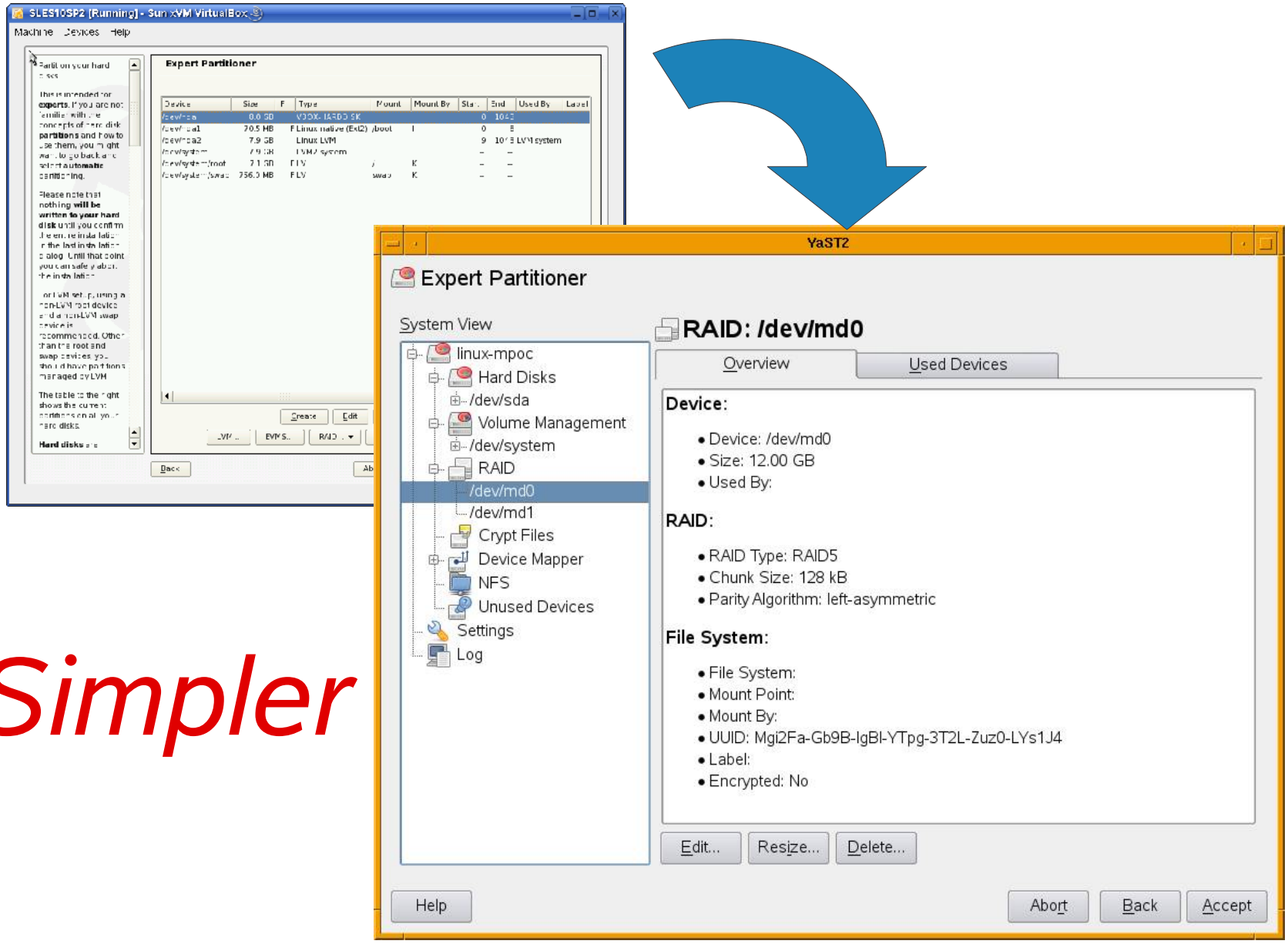
Prettier





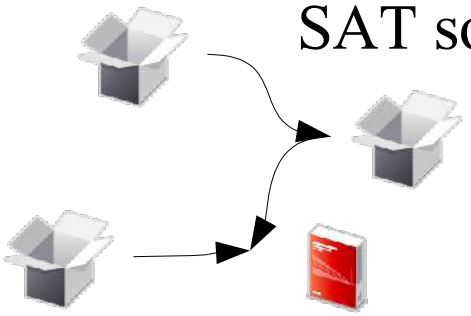
Simpler



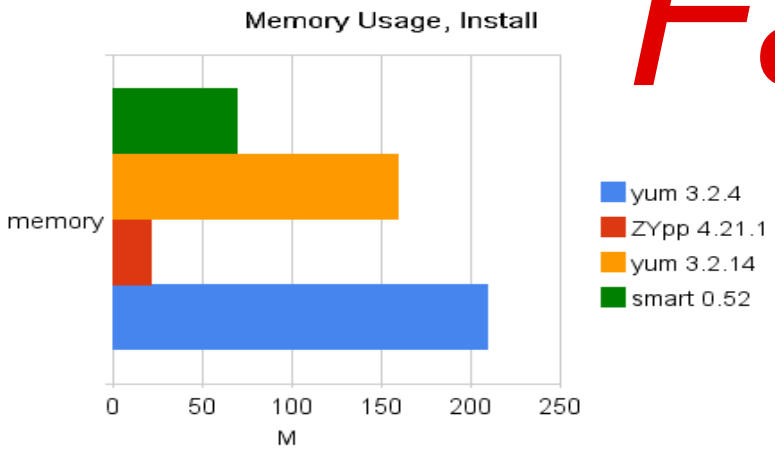

SLES10SP2 [Running] - Sun xVM VirtualBox
Machine Devices Help
Expert Partitioner
YaST2
Expert Partitioner
System View
linux-mpoc
Hard Disks
/dev/sda
Volume Management
/dev/system
RAID
/dev/md0
/dev/md1
Crypt Files
Device Mapper
NFS
Unused Devices
Settings
Log
RAID: /dev/md0
Overview
Used Devices
Device:
• Device: /dev/md0
• Size: 12.00 GB
• Used By:
RAID:
• RAID Type: RAID5
• Chunk Size: 128 kB
• Parity Algorithm: left-asymmetric
File System:
• File System:
• Mount Point:
• Mount By:
• UUID: Mgi2Fa-Gb9B-lgBl-YTpg-3T2L-Zuz0-LYs1J4
• Label:
• Encrypted: No
Edit...
Resize...
Delete...
Help
Abort
Back
Accept

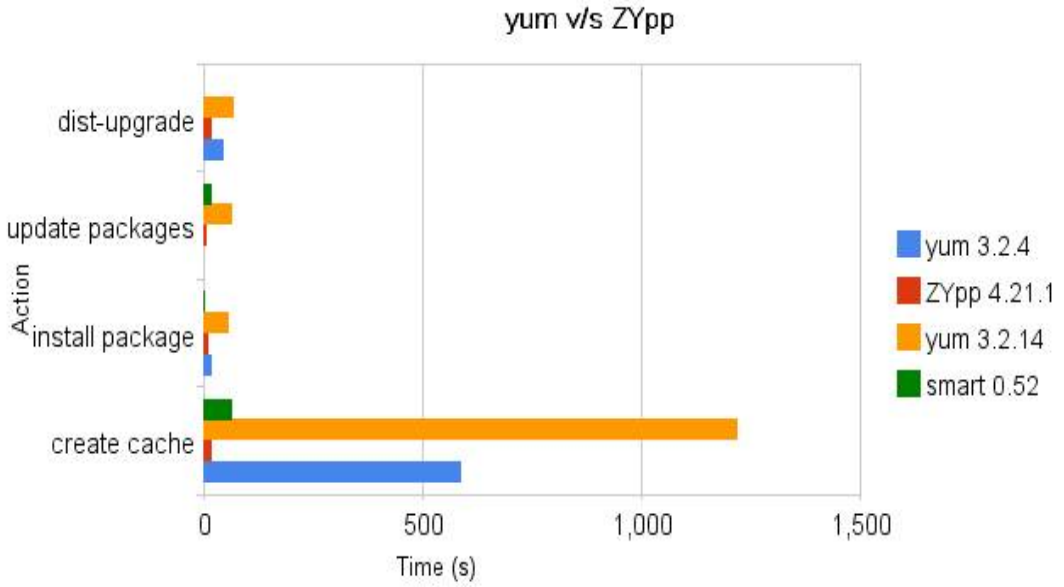
Simpler

SAT solver

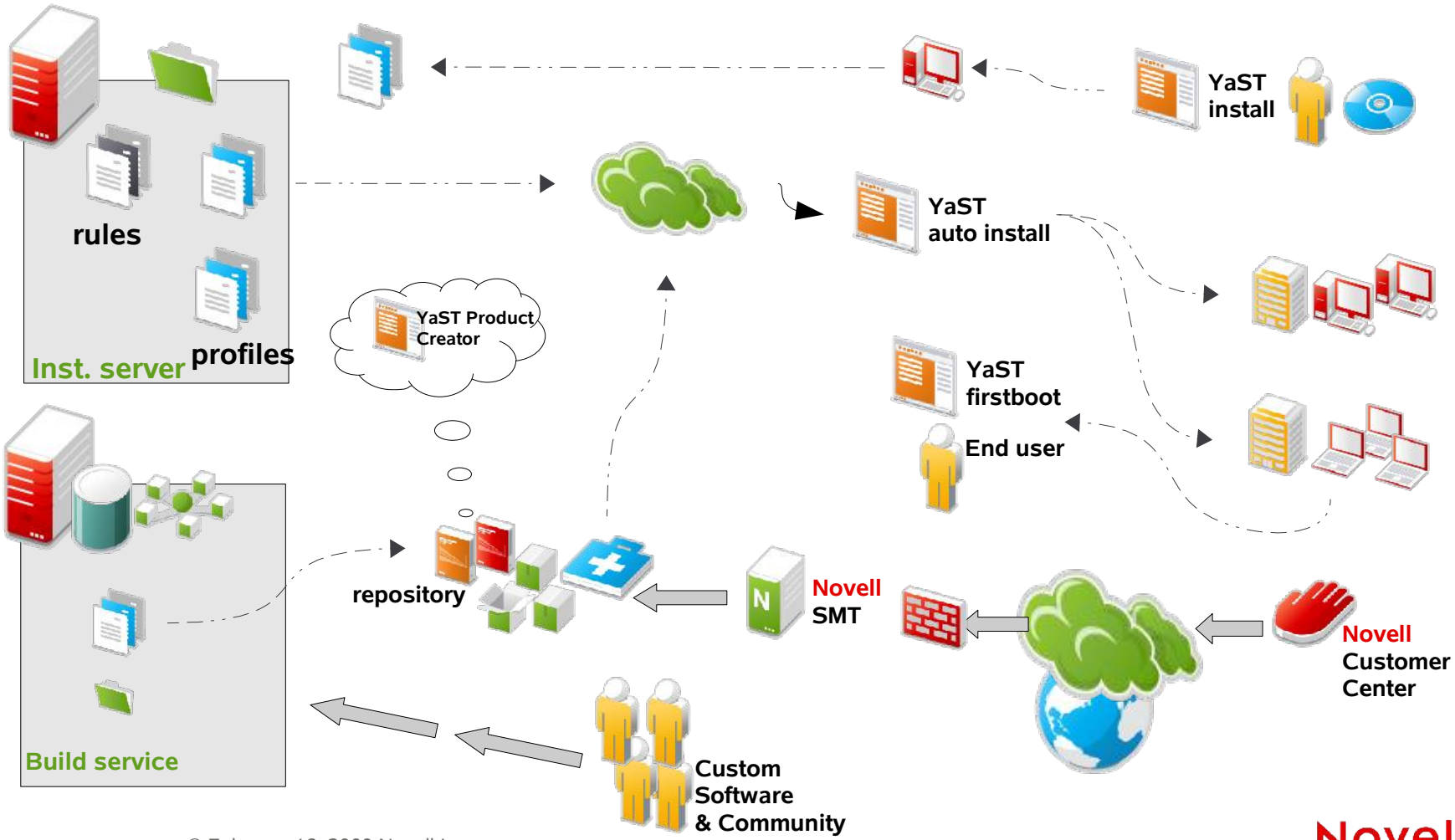


Fast





Integrated



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Challenges & Future work...

Challenges...

- Leverage new base infrastrure
- Community
- Distributions

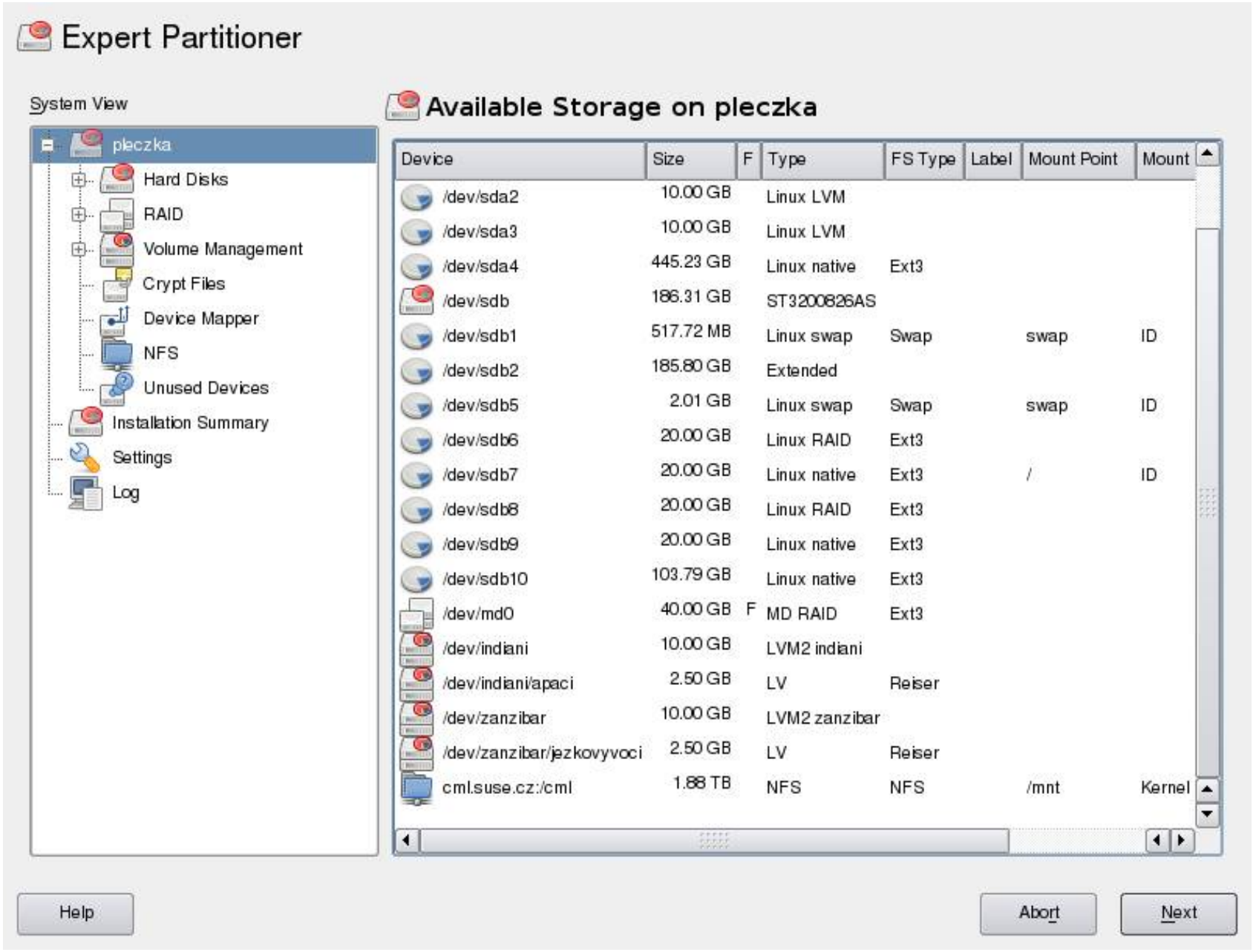
Package History

- Infrastructure since 11.1
- Missing:
  - Viewer
  - Undo?
  - Feed solver: System Cleanup?

```
2008-11-03 13:55:56|remove |desktop-data-openSUSE|11.1-34.1|noarch|
2008-11-03 13:55:58|remove |yast2-branding-openSUSE|2.17.0-8.3|noarch|
2008-11-03 13:56:03|install|AdobeICCProfiles|2.0-65.2|noarch||repo-non-oss|14a8d20f0375e54d6e1a73cde64b2e29114d336f
# 2008-11-03 13:56:05 flash-player-9.0.124.0-1.4.i586.rpm installed ok
# Additional rpm output:
# NPP_GetValue()
# NPP_GetValue()
#
2008-11-03 13:56:05|install|flash-player|9.0.124.0-1.4|i586||repo-non-oss|ffe4813716fee1b0b9519537bc79260a99f5403d
```

Partitioner

- Leverage and refine redesign
- Some new features


Expert Partitioner
System View
pleczka
Hard Disks
RAID
Volume Management
Crypt Files
Device Mapper
NFS
Unused Devices
Installation Summary
Settings
Log
Available Storage on pleczka
Device
Size
F
Type
FS Type
Label
Mount Point
Mount
/dev/sda2 10.00 GB Linux LVM
/dev/sda3 10.00 GB Linux LVM
/dev/sda4 445.23 GB Linux native Ext3
/dev/sdb 186.31 GB ST3200826AS
/dev/sdb1 517.72 MB Linux swap Swap swap ID
/dev/sdb2 185.80 GB Extended
/dev/sdb5 2.01 GB Linux swap Swap swap ID
/dev/sdb6 20.00 GB Linux RAID Ext3
/dev/sdb7 20.00 GB Linux native Ext3 / ID
/dev/sdb8 20.00 GB Linux RAID Ext3
/dev/sdb9 20.00 GB Linux native Ext3
/dev/sdb10 103.79 GB Linux native Ext3
/dev/md0 40.00 GB F MD RAID Ext3
/dev/indiani 10.00 GB LVM2 indiani
/dev/indiani/apaci 2.50 GB LV Reiser
/dev/zanzibar 10.00 GB LVM2 zanzibar
/dev/zanzibar/jezkovyvoci 2.50 GB LV Reiser
cml.suse.cz:/cml 1.88 TB NFS NFS /mnt Kernel
Help
Abort
Next

Community?

http://www.flickr.com/photos/ottovelo/2301521017/

Lower the barrier…

… for everyone

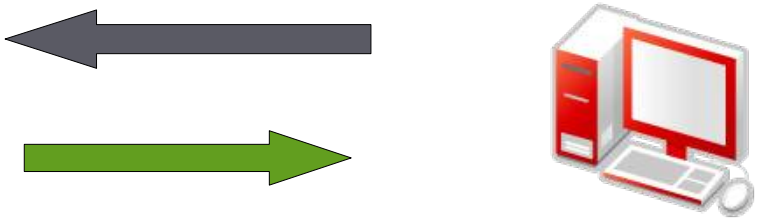
KDE:KDE4:Factory:Desktop:STABLE:Backport
devel:languages:ruby:extensions:...
opensSUSE_11.1_devel_languages_ruby

Complexity..

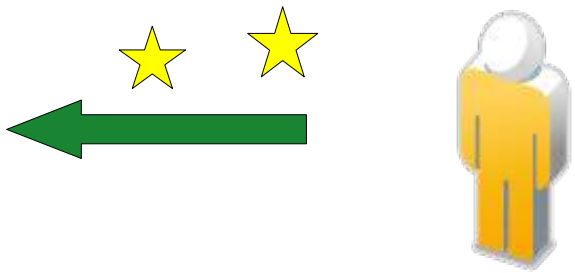
- http://www.flickr.com/photos/darkpatator/395215642/

Services

/services/john
X-SUSE-Distro: openSUSE_11.1



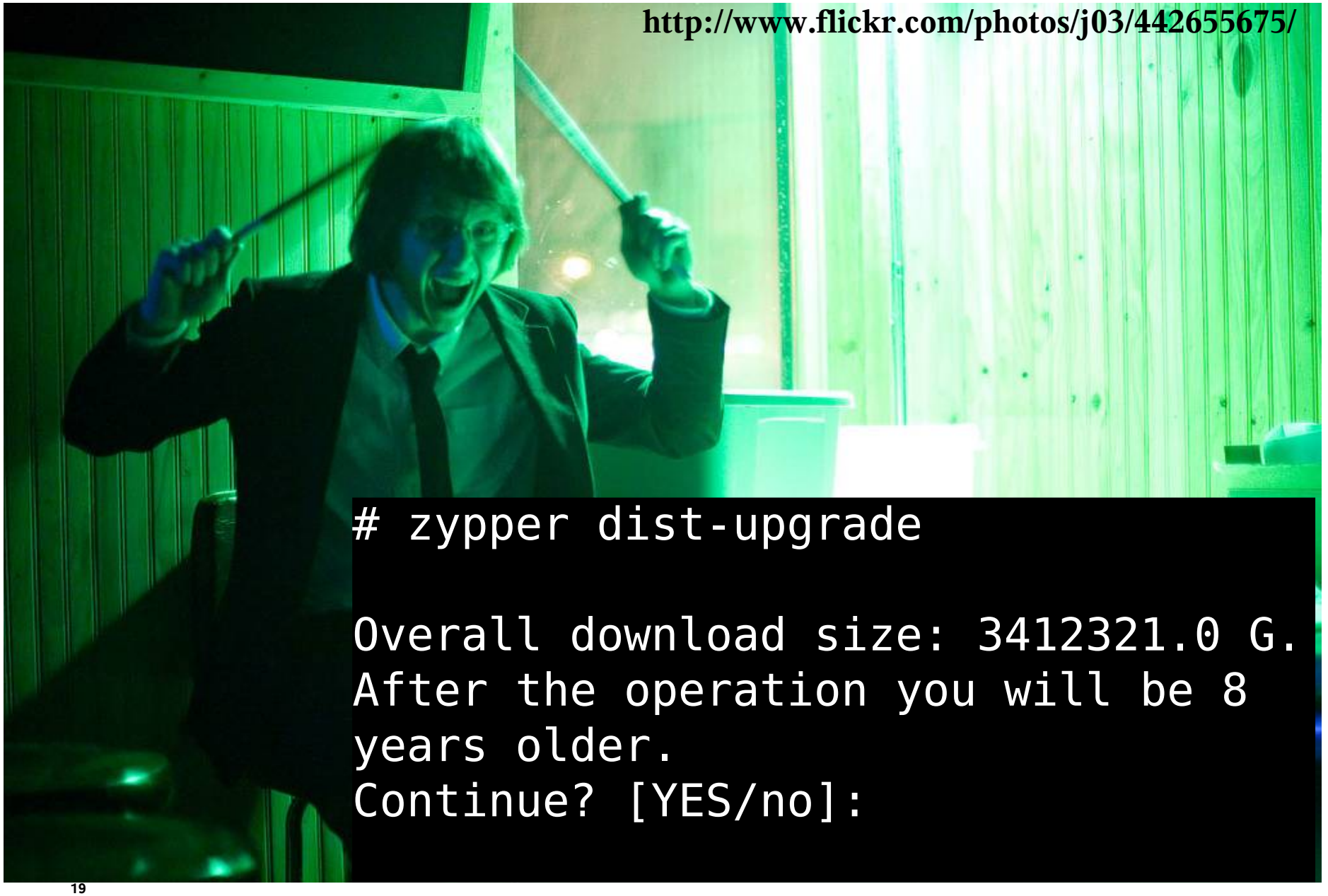
List of repos



ZYpp Service

Repos

Build **Service**

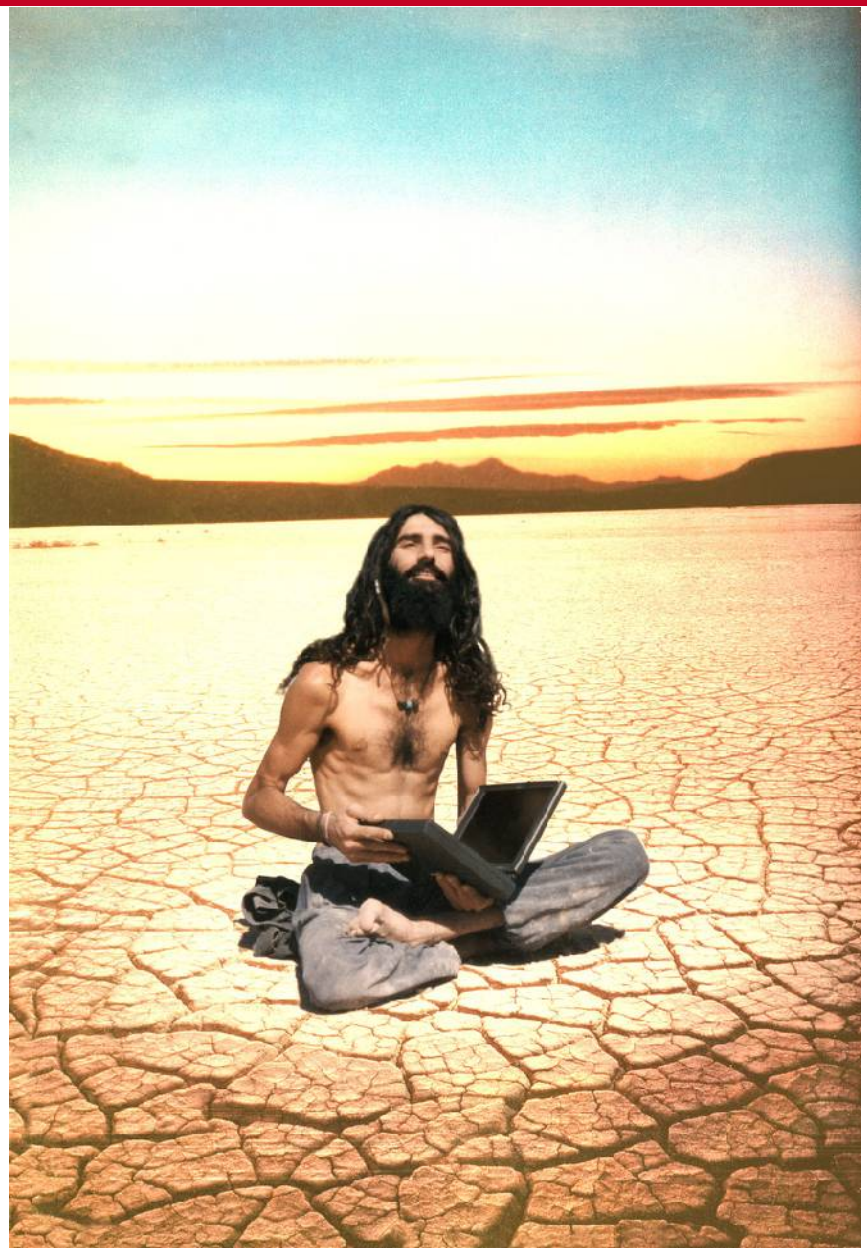

http://www.flickr.com/photos/j03/442655675/
zypper dist-upgrade
Overall download size: 3412321.0 G.
After the operation you will be 8
years older.
Continue? [YES/no]:

Not every user has reliable access to mirrors...

http://aria2.sourceforge.net/

http://mirrorbrain.org/

- Metalinks/Geo-mirrors
- Failover

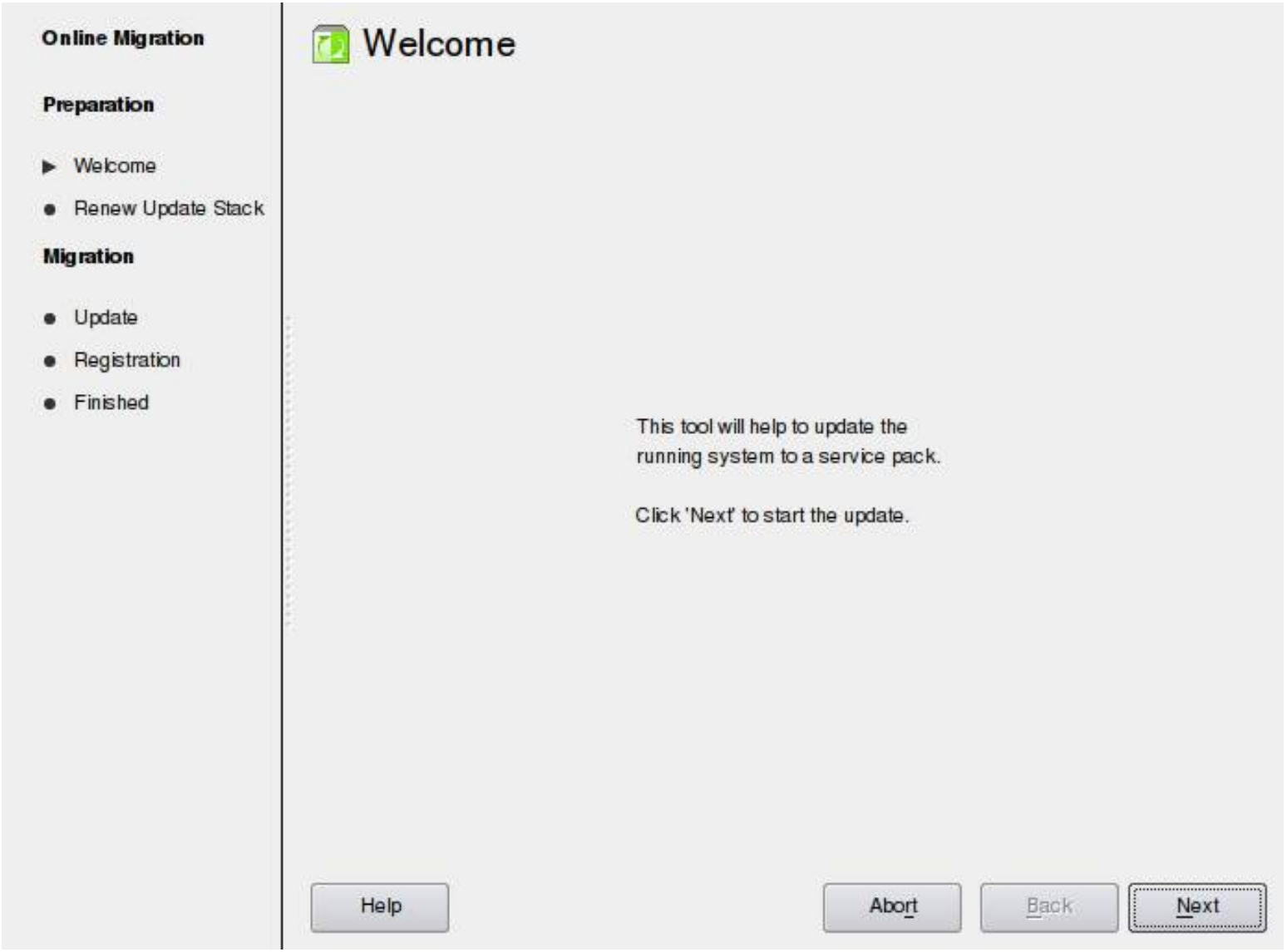


http://www.flickr.com/photos/73553/184036171/

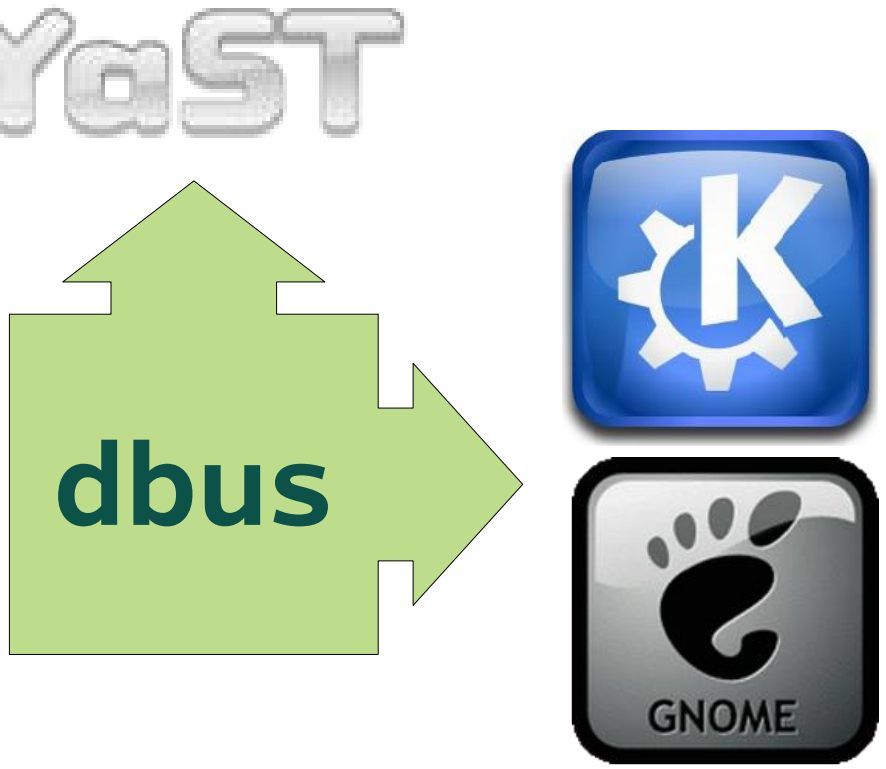
Other areas to improve/leverage:

- Factory, less rebuilds pushed
  - Mostly done
- Factory, use of deltarpms?
  - We support deltas outside maintenance updates since 11.0
- Commit policy (download, install)

Wagon


Online Migration
Preparation
Welcome
Renew Update Stack
Migration
Update
Registration
Finished
Welcome
This tool will help to update the running system to a service pack.
Click 'Next' to start the update.
Help
Abort
Back
Next

PackageKit
...Kit?



“Share this folder...”

- Storage
- Software

Management

YaST

CIM

data center

http://www.flickr.com/photos/pwz/2747433199/

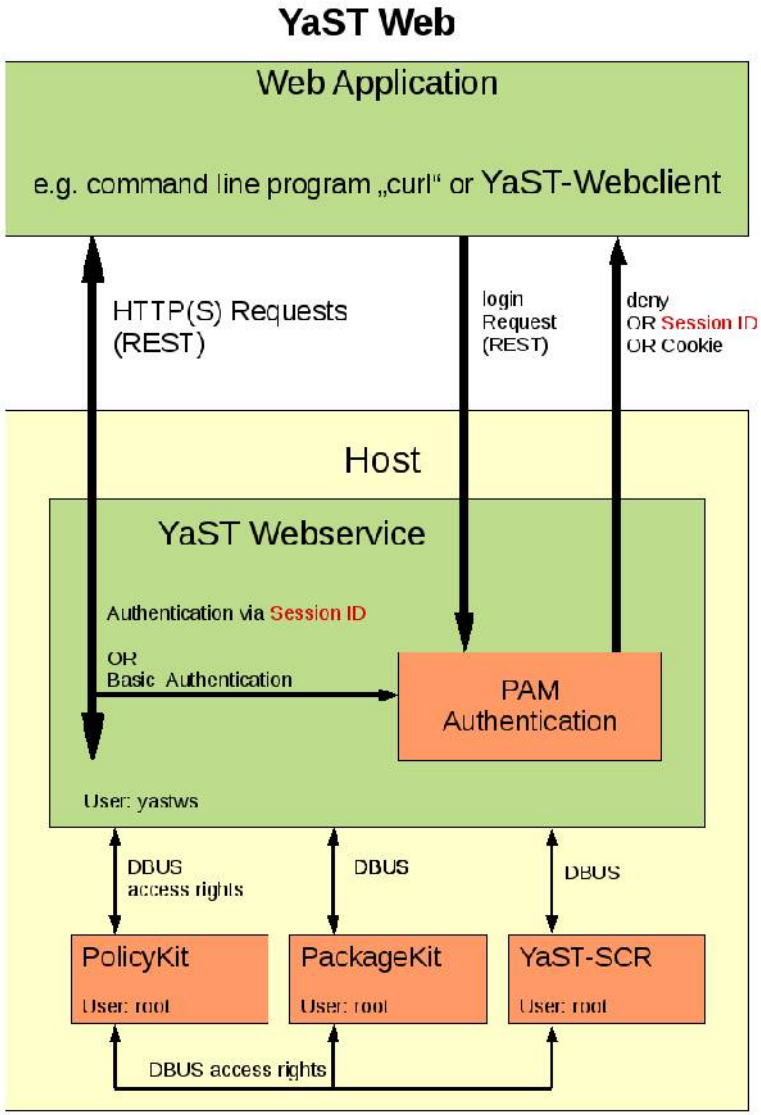
www.dmtf.org/standards/cim/

What do we have in common?...

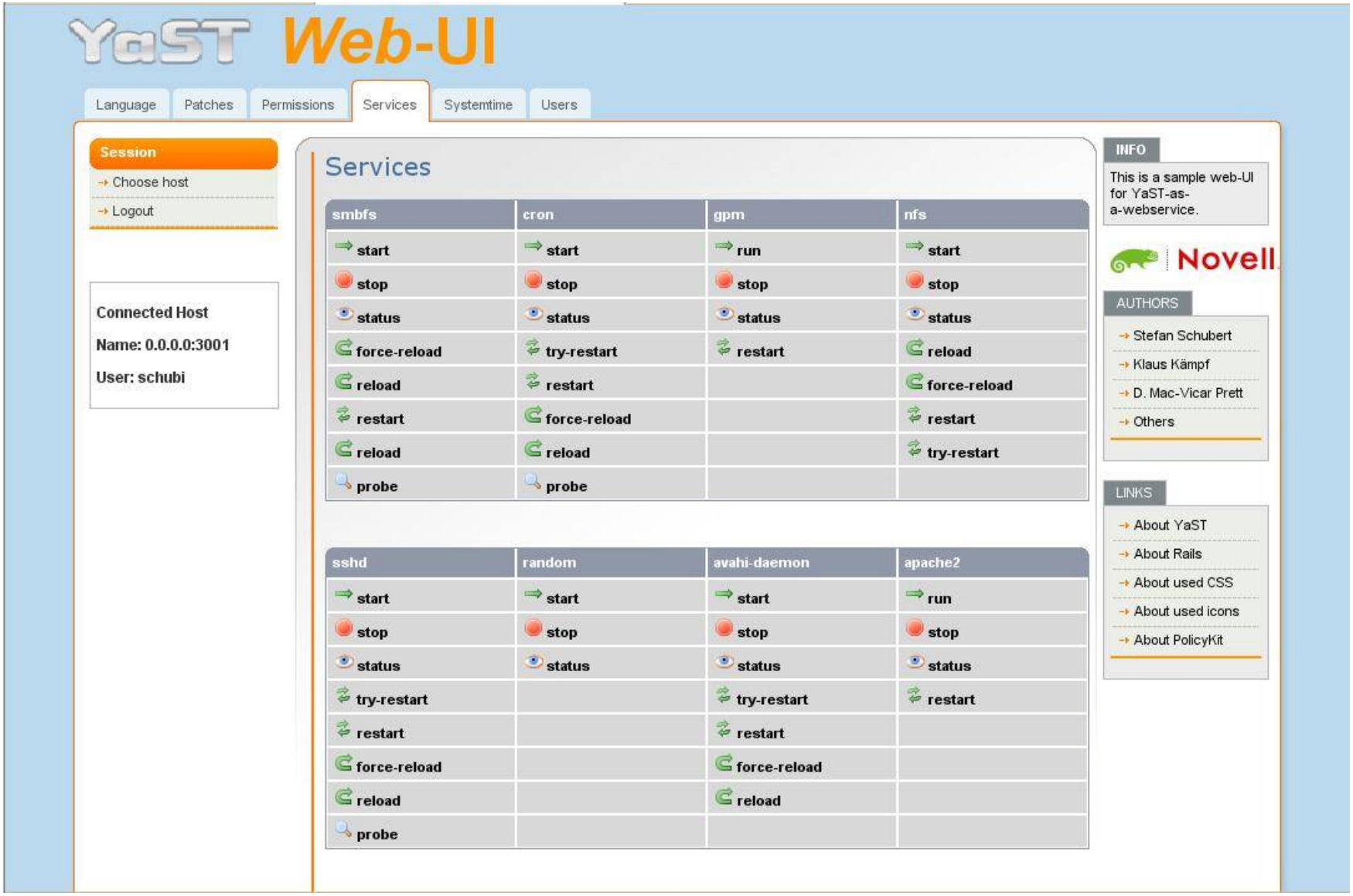
(hint) →

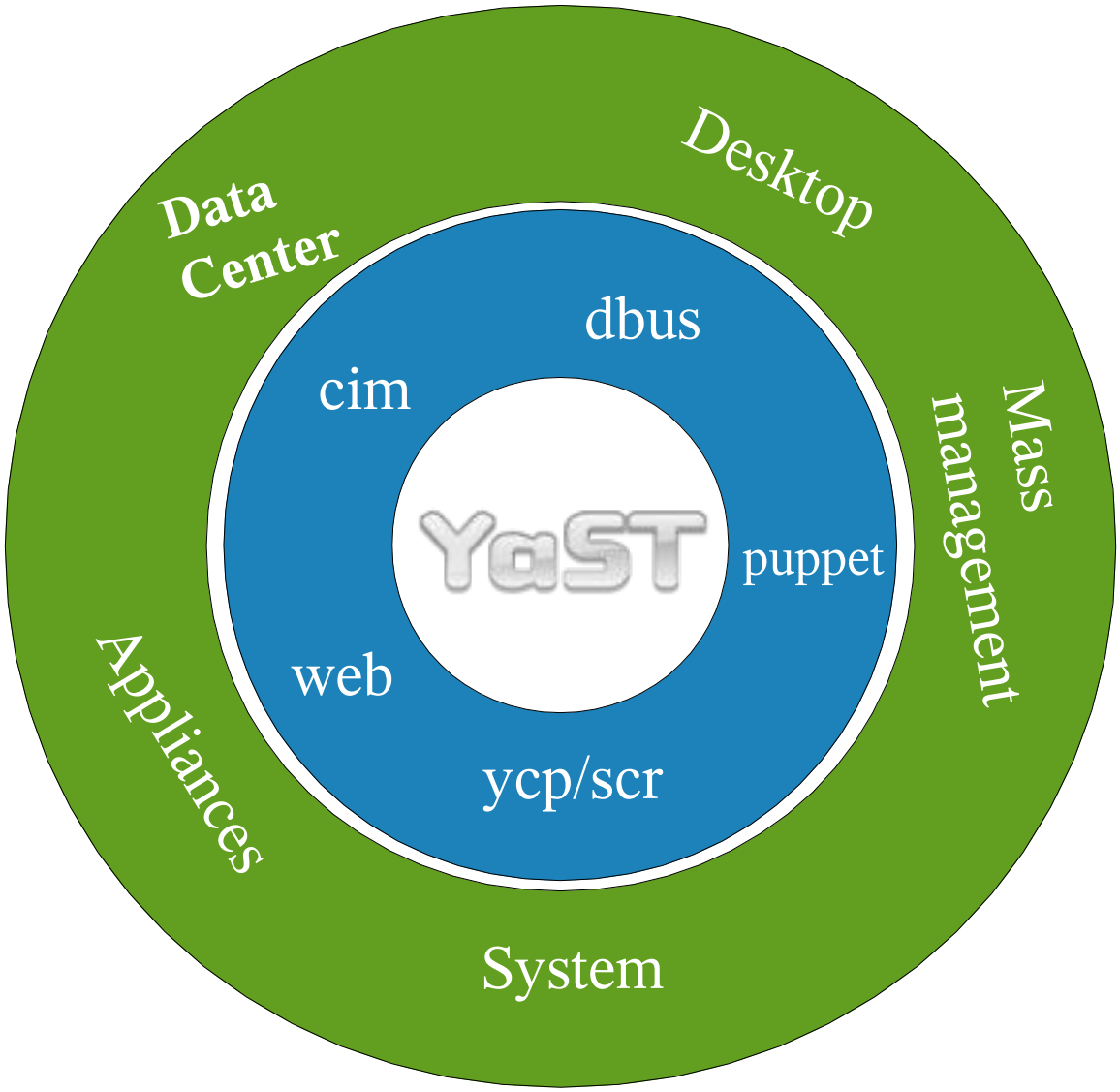
Some rights reserved (CC) Attribution-NonCommercial-ShareAlike 2.0 Germany Ludwig Gatzke | http://flickr.com/photos/stabilo-boss/

http://www.flickr.com/photos/stabilo-boss/93136022/


YaST Web
Web Application
e.g. command line program „curl“ or YaST-Webclient
HTTP(S) Requests
(REST)
login
Request
(REST)
deny
OR Session ID
OR Cookie
Host
YaST Webservice
Authentication via Session ID
OR
Basic Authentication
PAM
Authentication
User: yastws
DBUS
access rights
DBUS
DBUS
PolicyKit
User: root
PackageKit
User: root
YaST-SCR
User: root
DBUS access rights

YaST
Web
you


YaST Web-UI
Language
Patches
Permissions
Services
Systemtime
Users
Session
Choose host
Logout
Connected Host
Name: 0.0.0.0:3001
User: schubi
Services
smbfs
start
stop
status
force-reload
reload
restart
reload
probe
cron
start
stop
status
try-restart
restart
force-reload
reload
probe
gpm
run
stop
status
restart
nfs
start
stop
status
reload
force-reload
restart
try-restart
sshd
start
stop
status
try-restart
restart
force-reload
reload
probe
random
start
stop
status
avahi-daemon
start
stop
status
try-restart
restart
force-reload
reload
apache2
run
stop
status
restart
INFO
This is a sample web-UI for YaST-as-a-webservice.
Novell
AUTHORS
Stefan Schubert
Klaus Kämpf
D. Mac-Vicar Prett
Others
LINKS
About YaST
About Rails
About used CSS
About used icons
About PolicyKit


Data Center
Desktop
Mass management
Appliances
System
dbus
cim
YaST
puppet
web
ycp/scr

Help wanted!!

- Web skills
- Checkout the code in git.opensuse.org

Demo... “Managing with cURL”

Thanks a lot! Questions?
Dankeschön! Fragen?
Muchas gracias! Preguntas?

Join us!
yast-devel@opensuse.org
http://opensuse.org/YaST